d.	Divide labor costs by the most recent SMSA Index. (For this example, .8386 will be used for rural Mississippi.)	.8326	
		$ 249.03	$161.05
e.	Add the adjusted labor per diem and the non-labor per diem. This amount will be used for the specified percentile maximum operating cost calculation. (See Appendix B)	$ 410.08	
f.	For this example, the class maximum operating cost is $400.00	$ 400.00	
g.	Separate the lesser of e or f into labor and non-labor categories as explained in V.D.5.f in the State Plan.	$242.91	$157.09
h.	Multiply labor per diem by the SMSA Wage Index.	x .8386 $ 203.70	
i.	Combine and apply the trend factor as done in 3.c. above. The result is the Medicaid Prospective Operating Cost Component.	$ 203.70 + 157.09 360.79 x 1.21 $ 436.56	
j.	This Hospital s Medicaid Prospective Rate is the sum of 2.a.; 3.c.; and 4.i.: 44.55 + $8.09 + $436.56 =	$ 489.20	

APPENDIX B

Maximum Operating Cost Component

Procedures for determining the maximum operating cost component of reimbursement to hospitals are as follows:

(1) Facilities will be grouped according to the bed-size classifications as established in the State Plan.

(2) The following procedures will be used separately for each classification of facilities.

(a) Operating cost per diems as described at V.D. and illustrated at Appendix A, 3., will be arrayed from low to high.

(b) The percentile range will be computed by dividing the individual provider array location number for the scheduled operating cost per diems by the total number of providers in the array.

(c) The selected percentile as specified by this plan will then be determined.

The following is an example of the determination of the maximum operating cost per diem at the 80th percentile.

PROVIDER ARRAY LOCATION NUMBER	OPERATING COST PER DIEM	PERCENTILE
01	$50.00	9.09
02	57.10	18.18
03	58.20	27.27
04	58.25	36.36
05	59.10	45.45
06	62.90	54.55
07	76.80	63.64
08	80.01	72.73*
09	81.00	81.82*
10	92.00	90.91
11	93.00	100.00

*The 80th percentile falls between the operating cost per diems for provider numbers 08 and 09. The 80th percentile is then computed by interpolation and in this example would be $80.80.

APPENDIX C

Inflation Factor and Industry Trend Factor

An input price index will be used to compute the reimbursable change in the prices of goods and services purchased by hospitals. The input price index will consist of a market basket classification of goods and services purchased by hospitals, a corresponding set of market basket weights for purchased goods and services, and a related series of price indicators. Weights corresponding to market basket categories are for hospitals in the East South Central region of the United States and are specified in this appendix.

After the close of each calendar year, the input price index will be calculated to account for actual changes in the price indicators based on the market basket weights.

The index will be made available to the Mississippi Medicaid Commission by the Mississippi Research and Development Center. This factor will be called the inflation factor and shall be used for the purpose of adjusting costs for all providers to a common year-end. This factor will be applied for the number of months between the mid-point of each provider's reporting period and the mid-point of the most recently ended calendar year. The inflation factor is based on historical data and is not subject to redetermination at a later time.

The Mississippi Research and Development Center will also provide a trend factor to project the inflation rate for the next reimbursement period. Both the inflation factor and the trend factor will use the same market basket, market basket weights, and proxy price variables.

The trend factor is to be applied for the number of months between the mid-point of the most recently ended calendar year and the mid-point of the reimbursement period.

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APPENDIX C cont.

The trend factor and inflation factor for educational costs will be determined using only the payroll expenses and employee benefits portion of the market basket in this appendix.

Trend Factor Adjustment

If the trend factor should be more than or less than the actual inflation rate for the period of time in question by more than 1% on an annualized basis, the next prospective rate calculation shall include a trend factor adjustment for the difference between the trend factor used in the previous period and the actual inflation rate for that period.

Such a trend factor adjustment is to be based on the same previous year's cost on which the original trend factor was applied.

This is further explained as follows:

$$\text{Trend Factor Adjustment} = \text{Actual Inflation Rate for Previous Year} - \text{Trend Factor used for Previous Year} \times \text{Medicaid Operating Cost Per Diem for Previous Year*}$$

*This cost is not to exceed the class ceiling and is adjusted by the wage index used in the previous year. (See Appendix A, 4, i).

The trend factor adjustment for education costs shall also be determined using the same procedures as outlined above.

The trend factor adjustments shall be added or deducted in determining the next year's Medicaid Prospective Rate immediately after the application of the trend factors for the period. (See Appendix A, 3, c and Appendix A, 4, i).

Market Basket

The following expenses categories shall be used as the market basket. Price indicators for each category shall be the latest available source as specified in the National Market Basket Price Proxies or the Federal Register.

APPENDIX C con't

	EXPENSE CATAGORY	RELATIVE WEIGHT
1	WAGES & SALARIES	0.5583
2	EMPLOYEE BENEFITS	0.0980
		0.6563
3	PROFESSIONAL FEES	0.0076
4	MALPRACTICE INS	0.0066
5	FUEL & UTILITIES	0.0316
6	FOOD	0.0356
7	OTHER	0.2623
8		
9	TOTAL	1.0000

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APPENDIX C

Computation of Rate Setting Factors

The calculation of the Medicaid Prospective Rate uses the following rate setting factors:

1. Inflation Factor
2. Education Inflation Factor
3. Trend Factor
4. Education Trend Factor
5. Labor Percentage
6. Wage Factor

Their purpose and method of computation are as follows:

Inflation Factor

The inflation factor adjusts the operating costs from the provider's fiscal year end to a December 31 calendar year end. The inflation factor is calculated by the following steps (an example is on page 26h):

1. Determine annualized inflation rate

   a. Multiply the historical moving percentage (Column 2) by the relative weight (Column 3) for each of the expense categories (Column 1).

      The historical moving percent is for the quarter ending December 31 of the provider's fiscal year ends (i.e., 88:4).

   b. The amounts determined in a above are totaled. This results in the annualized inflation rate. (See Column 4 page 26h.)

2. Determine inflation factor for each month

   a. Divide the annualized inflation rate determined in 1b above by 12. (See example of page 26h; (Column 4, line 17 divided by 12). This results in a monthly inflation rate (column 4, line 18).

   b. Multiply the monthly inflation rate by the number of months between the provider's fiscal year end and March 31. (i.e., June 30 = 9; September 30 = 6; December 31 = 3).

Education Inflation Factor

The Education Inflation Factor is calculated by the following steps (an example is on page 26i):

1. Determine the annualized education inflation rate.

   a. Calculate the adjusted relative weight.

      (1). Total the relative weight for the expense categories 1) wages and salaries and 2) employee benefits (Column 3, line 4).

      (example .5583 + .0980 = .6563)

      (2). The ratio of the relative weight (i.e., wages = .5583) to the total of the relative weights (.6563) is the adjusted relative weight (i.e., .5583 - .6563 = .8507)

   b. Multiply the historical moving percentage (Column 2) by the adjusted relative weight (Column 4) as calculated in (2) above. (i.e., 4.8 x .8507 = 4.083).

   c. The amounts determined in b above are totaled. This results in the annualized education inflation rate. (i.e., Column 5, page 26i) (i.e., 4.083 + .582 = 4.666).

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2. Determine the education inflation factor for each month.

a. Divide the annualized education inflation rate (Column 4, line 17 by 12. This results in a monthly education rate (Column 4, line 18) or (i.e., 4.67 - 12 = .39).

b. Multiply the monthly education inflation rate (i.e., .39) by the number of months between the provider's fiscal year end and March 31. (i.e., June 30 = 9; September = 6; December 31 = 3).

Trend Factor

The trend factor adjusts the operating costs from the mid-point of the December 31 common year to the mid-point of the reimbursement period (March 31). This would adjust the operating cost for a period of twenty-one (21 months).

The trend factor is calculated by the following steps (an example is on page 26j):

1. Multiply the relative weight (Column 2) by the percent growth (Column 3) for each of the expense categories in Column 1.

   The percent growth is for the quarter ending December 31 one year after the common year end (i.e., 89:4)

2. The amounts determined in 1 above are totaled. This results in the trend factor (Column 4, line 9).

   NOTE: Where data is not available for an expense category the overall percentage may be used.

Education Trend Factor

The Education Trend Factor is calculated by the following steps (an example is on page 26j):

a. Calculate the adjusted relative weight.

   1. Total the relative weight for the expense categories 1) wages and salaries and 2) employee benefits. (example 55.83 + 9.8 = 65.63)
   2. The ratio of the relative weight (i.e., wages = 55.83) to the total of the relative weights (65.63) is the adjusted relative weight (i.e., 55.83 - 65.63 = .8507)